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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/089,476	03/28/2002	Gerhard Gumpoltsberger	ZAHFRI P422US	ZAHFRI P422US 1029	
20210	7590 06/24/2003				
DAVIS & BUJOLD, P.L.L.C. FOURTH FLOOR 500 N. COMMERCIAL STREET			EXAMINER		
			ABDELNOUR, DENNIS J		
MANCHEST	ER, NH 03101-1151		ART UNIT PAPER NUMBER		
			3681	·····	
			DATE MAILED: 06/24/2003	DATE MAILED: 06/24/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Applicati n N .	Applicant(s)			
	10/089,476	GUMPOLTSBERGER, GERHARD			
Office Action Summary	Examiner	Art Unit			
	Dennis J. Abdelnour	3681			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address (f			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	66(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on 28 h	<u> 1arch 2002</u> .				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ Thi	s action is non-final.				
3) Since this application is in condition for allowa closed in accordance with the practice under the state of Olaires.					
Disposition of Claims	_				
4) Claim(s) <u>13-24</u> is/are pending in the application					
4a) Of the above claim(s) is/are withdraw	vn trom consideration.				
5) Claim(s) is/are allowed.					
6) Claim(s) <u>13-24</u> is/are rejected.	÷	<b>;</b>			
7) Claim(s) is/are objected to.		·			
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9) The specification is objected to by the Examiner	· ·	the Everyines			
10)⊠ The drawing(s) filed on 28 March 2002 is/are: a					
Applicant may not request that any objection to the		•			
11) The proposed drawing correction filed on	is: a) ☐ approved b) ☐ disappro	oved by the Examiner.			
If approved, corrected drawings are required in rep					
12) The oath or declaration is objected to by the Exa	aminer.				
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	a)-(d) or (f).			
a)⊠ All b)□ Some * c)□ None of:					
1. Certified copies of the priority documents	s have been received.	:			
<ol><li>Certified copies of the priority documents</li></ol>	s have been received in Applicati	on No			
3. Copies of the certified copies of the prior application from the International Bur  * See the attached detailed Office action for a list of the certified copies of the prior application.	eau (PCT Rule 17.2(a)).				
14) Acknowledgment is made of a claim for domestic	·				
a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)	,,,	,			
1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)			
S. Patent and Trademark Office	tion Cumman	Part of Paper No. 05			

### **DETAILED ACTION**

The following is a first action on the merits of application serial 10/089,476 filed on March 28, 2002. Claims 13-24 are pending.

## Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 13-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 13, the limitation "wherein in said multi-step transmission a reversal of direction of rotation takes place between said input shaft and said output shaft using the at least two forward gears and the at least one reverse gear takes place without reversal of direction of rotation between said input shaft and said output shaft" is indefinite. It doesn't appear that a reverse gear can be established without reversing the direction of the claimed output shaft, if the same output shaft outputs a rotation for both forward speeds.

Claim 13 recites the limitation "at least one input shaft" and "an output shaft" in line3. Subsequent claims recite "input shafts", "said input shafts", "an input shaft", "said output shafts", "said shafts", etc. It appears there are multiple shafts being claimed, yet no distinction is made between input shafts, output shafts, and shafts. The limitations in subsequent claims lack proper antecedent basis and should be corrected.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 13-15 and 18-24, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Takada et al. (USPN 4,682,518).

Figure 1 shows a continuously variable vehicle transmission having a variator transmission 1 and a multi-step planetary gear transmission 42 with an input shaft 64, an output shaft connected to gear 34, two forward gears speeds – Low and High, and a reverse gear R. The multi-step transmission 42 is configured such that a shift from a forward to a reverse drive range3 is completed within the multi-step transmission through combination of brakes and clutches 56, 58, and 60, and without a reversal of rotation of the input shaft 64.

An input shaft 8 of the continuously variable transmission 1 is parallel with the output shaft 10 of the continuously variable transmission, the input shaft 64 of the multi-step transmission, the output shaft at 34 of the multi-step transmission, and the output wheel axles 38 and 40.

The input shaft 64 and the output shaft at 34 are configured as coaxial shafts on one side of the multi-step transmission housing.

The multi-step transmission 42 is configured as a planetary transmission, and is power-shiftably designed. The two forward drive ranges – Low and High – are shiftable and have an

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overlapping range. Simultaneous adjustment of the continuously variable transmission 1 and the multi-step transmission 42 is possible.

5. Claims 13 and 16-17, as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Miyata et al. (USPN 5,888,160).

Figure 1 shows a continuously variable transmission 20 in series with a planetary multistep transmission 21. Multi-step transmission 21 includes input shaft 39, output shaft 19, multiple forward speed ratios, as well as a reverse gear ratio. Clutches 36, 40, and 37 can be engaged/disengaged to produce the multiple gear drive ratios through the multi-step transmission 21 without a reversal of direction of rotation between the input shaft and output shaft of the variable one-way toroidal drive transmission 20.

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Similar continuously variable transmissions in combination with a multi-step transmission having forward and reverse gear ranges can be seen in USPN 4,706,518 and 4,602,525 to Moroto et al., and also in USPN 6,217,473 to Ueda et al.

#### Facsimile Transmission

7. Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is (703) 305-3597. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mailroom processing and delivery

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time. For a complete list of correspondence <u>not</u> permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check <u>should not be</u> submitting by facsimile transmission separately from the check.

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Typed or printed name of person signing this certificate:				
(Signature)				

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis J. Abdelnour whose telephone number is (703) 305-5309.

The examiner can normally be reached on Monday-Friday, 8:00-5:30, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703) 308-0830. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3597 for regular communications and (703) 305-3597 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

dja />N June 12, 2003

> Richard M. Lorence Primary Examiner